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EXAMINER

STERRETT, JONATHAN G

ART UNIT PAPER NUMBER

3623

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/887,907	<b>Applicant(s)</b> BIRKNER ET AL.	
	<b>Examiner</b> Jonathan G. Sterrett	<b>Art Unit</b> 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Summary*

1. This **Final Office Action** is responsive to applicant's amendment filed August 10, 2006. Currently **Claims 1-22** are pending.

### *Response to Argument*

2. The applicant argues that the combined teachings of Norand and Coble fail to teach a "planning system". In further support of this argument, the applicant acknowledges that Norand teaches tracking budgetary information (see page 8).

The examiner respectfully disagrees.

The rejection of Claim 1 is made over a combination of Norand, Coble and Brown. Brown teaches a planning system for conducting preplanning for different projects. Brown's system ensures that plans are in place prior to execution (note Brown teaches an example where his invention is used in the homebuilding industry) and Brown's system tracks progress over the course of a project. Norand's teachings (Reference X1 page 2 para 3 & 5) reference storing project information (if project information was static, i.e. there was only one project, then why would there be a need to collect data on project information, since para 3 of Norand's X1 is about collecting data from the field). Additionally, the examiner interprets this to be multiple projects since para 5 discusses multiple job assignments. The combination of the planning system taught by Brown combined into the handheld Norand device with the construction quality data gathering system of Coble renders the claimed limitation obvious.

3. The applicant argues that Norand and Coble do not teach performing site engineering assessments, including environmental concerns.

The examiner respectfully disagrees.

The claim recites “a design system to process environmental site engineering assessment data”. The term ‘environment site engineering assessment’ does not further add patentable weight to the claim because as a descriptor of ‘data’ it does not add structure to the claim such that it changes how the design system is ‘processing’ data.

For example, if the claim read “a design system to process engineering data to prepare a preliminary design”, then the descriptor “engineering” is functional in that it modifies how a preliminary design is prepared. As the claim limitation currently reads, any label placed in front of data does not affect the functionality or structure of the claim, and thus, the design system as claimed is processing data. This is classic nonfunctional descriptive material because the data labels can be changed without affecting the function of the claim.

Even assuming, arguendo, that the terminology “environmental site engineering assessment” data was functional, there is a failure in the specification for this term to be definitely defined. In these cases the MPEP is clear that the broadest possible interpretation must be applied in examination. (Although the applicant may argue that ESEA is an industry known term, what is considered to be ESEA at one point in time may change, therefore such a term should be accompanied by definitive terms in the

claims to positively recite what ESEA constitutes to the applicant as far as the applicant's invention is concerned.)

As far as applying the broadest reasonable interpretation of "environmental site engineering assessment data", Coble teaches measuring weather conditions as part of data input during construction activity. Coble teaches a design system to document 'as built' in the field.

4. The applicant argues a plethora of terms on page 9 that define Environmental Site Engineering Assessment (ESEA) in that Norand, Coble and Brown cannot handle ESEA data. In support of this argument, the applicant states that this was done so per the examiner's comments about non-functional language.

The examiner respectfully disagrees.

The recited features listed on page 9 beginning in line 6 do not appear in the specification as a definitive definition as to what ESEA data is. The recited features do not appear in the claim. As discussed above, processing Environmental Site Engineering Assessment data as is claimed does not distinguish over the cited references. The examiner pointed out in the previous office action that the terms listed (now since removed) in the claim did not structurally affect the claim in how the data was processed. The claim as it is now recited does not correct this deficiency because it still recites a design system processing data. As discussed above, the data that is being processed needs to be connected structurally to the rest of the claim in such a way as for the type of data being recited to affect the functionality of the remainder of

the claim. Otherwise the label describing the data becomes non-functional descriptive material and does not further limit the claim.

5. The applicant argues on page 10 that Brown and Coble do not teach pre-design planning and design management as a design system to perform site-engineering assessment that includes: Environmental site assessments.

The examiner respectfully disagrees.

Brown teaches a planning system to conduct predesign of a project having a plurality of sub-projects. Brown's system meets the claim limitations because it processes project scheduling and planning data to design projects (i.e. it is a planning system) prior to the projects being conducted. As noted above, the limitation 'environmental site engineering assessment' is non functional because it does not affect how the design system processes data. For example, the following limitations are patentably indistinct from each other: "A design system processes accounting data"; "A design system processes aerospace airframe data"; "A design system processes petroleum refinery design data". Thus, the limitation presented in claim 1 of "A design system to process environmental site engineering assessment data" does not patentably distinguish itself from the cited prior art of Brown, because Brown contains a project design system that processes data (project management and scheduling data).

6. The applicant argues on page 11 that the cited references do not teach a variety of types of site engineering assessments relating to utility, conflicts and relocations,

planning of multi-project coordination at the same work location, geotechnical investigations, coordination survey activities, real estate and right of way acquisitions, archeological investigations and design audits of engineering calculations, pre design planning and design management as a design system to perform assembly of construction documentation; the use of handheld computers as part of the design and planning system to coordinate design conflicts and construction sequencing for multiproject construction activities competing for the same equipment, real estate and resources.

The examiner respectfully disagrees.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a variety of types of site engineering assessments relating to utility, conflicts and relocations, planning of multi-project coordination at the same work location, geotechnical investigations, coordination survey activities, real estate and right of way acquisitions, archeological investigations and design audits of engineering calculations, pre design planning and design management as a design system to perform assembly of construction documentation; the use of handheld computers as part of the design and planning system to coordinate design conflicts and construction sequencing for multiproject construction activities competing for the same equipment, real estate and resources) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

7. The applicant argues on page 11 that there is no motivation to modify the references to anticipate the claimed invention.

The examiner respectfully disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, there is a compelling reason to combine the teachings of Norand, Coble and Brown. Norand teaches the advantages of providing workers in the field with an automated, handheld device that automates much of the data gathering relating to tracking their work activities in the field. Norand teaches that his device improves accuracy and reduces the paperwork requirements by automating much of the data entry. Coble teaches a handheld device specifically for use by construction foreman, where the construction foreman is responsible for all aspects of overseeing work, including the quality. According to Coble, the construction foreman is also responsible to maintain daily data collection, to document daily activities including taking pictures and recording environmental data that is salient to the management of the construction project. The motivation to combine Norand with Coble lies in the improvement in productivity



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experienced by Coble's construction foreman in having the paperwork automation taught by Norand. Brown teaches a system for design of project plans. Brown teaches that having a predefined and predeveloped project for those involved in a variety of subprojects helps ensure the overall success of the main project. Brown teaches that his approach to coordinating the project design for a variety of subprojects improves the coordination and management of all the subprojects. One of ordinary skill in the art would find motivation to combine the handheld device of Norand with the construction teachings of Coble and further with the distributed project planning teachings of Brown to provide workers in the field with a handheld device that provides data gathering, connects to a planning system to receive schedule data and tracks materials and progress for each project at a construction site. Norand, Coble and Brown are all analogous art and there is a reasonable expectation of success in seeking to combine them. Thus, one of ordinary skill in the art would combine the teachings of Norand, Coble and Brown to anticipate the claimed invention with a reasonable expectation of success to experience the described benefits.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. **Claims 1-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Norand's Pen-Key handheld computer (Norand)** in view of **Coble** and further in view of **Brown US 5,923,552** (hereinafter **Brown**).

Coble, Dr. Richard J; Qu, Tan; Sun, Wei; "Multimedia Communications for Construction Foremen", 1998, AACE International Transactions, pp.1-5.

**Norand's Pen-Key handheld computer is described in the following documents:**

"Norand-Payback", February 6, 1998, Norand.com, pp.1-5,  
[web.archive.org/web/19980206121604/www.norand.com/payback/pay\\_retn.html](http://web.archive.org/web/19980206121604/www.norand.com/payback/pay_retn.html),  
hereafter referred to as **Reference U1**.

"Norand – Products", February 6, 1998, Norand.com, pp.1-2,  
[web.archive.org/web/19980206114724/www.norand.com/6622.html](http://web.archive.org/web/19980206114724/www.norand.com/6622.html), hereafter referred  
to as **Reference V1**.

"Norand – Payback", February 6, 1998, Norand.com, pp.1-2,  
[web.archive.org/web/19980206121550/www.norand.com/payback/pay\\_intro.html](http://web.archive.org/web/19980206121550/www.norand.com/payback/pay_intro.html),  
hereafter referred to as **Reference W1**.

Wood, Michael, "Fighting the paperwork nemesis", March 1996, American Gas  
v78n2, pp.32-33, hereafter referred to as **Reference X1**.

"Norand – Training", February 6, 1998, Norand.com, pp.1-2,  
[web.archive.org/web/19980206120946/www.norand.com/sup\\_ti\\_descrip\\_MS.html](http://web.archive.org/web/19980206120946/www.norand.com/sup_ti_descrip_MS.html),  
hereafter referred to as **Reference U2**.

"Powering better customer service. (Boston Edison implements mobile  
computing solution)(Company Operations)", May 1997, Communications News, v34, n5,  
p50, Dialog 02070908 19414033, hereafter referred to as **Reference V2**.

Regarding **Claim 1**, Norand teaches:

**a handheld computer adapted to collect construction quality data from the  
field;**

Reference X1 page 2 paragraph 3 line 1-3, Norand Pen\*Key handheld  
computers are used in the field.

Reference X1 page 2 paragraph 3 line 9-10, inspection reports (i.e. construction  
quality data) from the field are collected in real time by Norand system.

**a planning system to track budgetary information;**

Reference X1 page 3 paragraph 2 line 2-4, time and materials for construction  
contractors (i.e. budgetary information) is tracked by the Norand system.

**a construction system to track material consumption and progress for each  
project,**

Reference X1 page 2 paragraph 3 line 7-10, project information and time sheets  
for employees tracked by system.

**the construction system adapted to receive quality data collected from the handheld computer,**

Reference X1 page 2 paragraph 3 line 9-10, inspection reports (i.e. construction quality data) from the field are collected by Norand system –see line 3-4, this information is uploaded to the mainframe (i.e. construction system).

**store daily project reports**

Reference X1 page 2 paragraph 3 line 8-10, forms (i.e. reports) are used to store information that was previously hand written. These forms include daily time sheets and project information (i.e. daily project reports).

**and generate key indicator reports**

Reference U1 page 4 paragraph 11 line 1-3, reports collected from data entered into the system can be generated of any key indicators regarding worker performance.

Norand does not teach:

**a design system to process environmental site engineering assessment data;**

Coble teaches:

**a design system to process environmental site engineering assessment data;**

Page 4 paragraph 1 line 5-7, handheld system incorporates computer aided design (CAD) drawings to record construction activities (i.e. process site engineering data).

Page 4 paragraph 1 line 12-15, construction activities can be assessed and recorded using computer aided design (CAD) system.

(The examiner notes that the data described as “**environmental site engineering assessment**” is considered non-functional descriptive material since the data as claimed does not add patentable structure to the claim. The design system is only processing data including the above elements. The elements as listed do not structurally change how the design system is processing them. Please see the arguments section for suggestions to change the claim to help overcome the rejection)

Both Coble and Norand disclose providing wireless mobile computing capability to field workers, thus both Coble and Norand are analogous art.

Coble teaches that providing construction crews in the field with mobile wireless devices improves their productivity (Page 3 paragraph 2 line 1-2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Norand, regarding providing field workers with mobile computers, with providing mobile workers with the capability of providing site

engineering assessments, as taught by Coble, because it would improve the productivity of construction workers at the job sites.

Coble further teaches of the need to connect the construction foreman, who is responsible for the onsite documentation and management of a project, with the project engineer, who receives design plans from the project architect (see Figure 2). Furthermore, Coble teaches the need to apply project management techniques to manage the construction projects (page 4 para 1 line 7, project management tasks in the field are recorded as being completed). Coble teaches that plans are received from the architect by the project manager (i.e. who applies project management).

Coble teachings address the use of automation (i.e. a handheld wireless device) in the field by construction foreman to record activities that ensure a project is on track and provide the necessary documentation supporting the project management of construction activities. Coble also teaches that updates from the construction foreman are connected to a design system so that drawings reflect what is built.

While Coble does not teach a planning system per se, he acknowledges the need to connect the handheld computer in the field, which records information that is updated to the design system (e.g. recording as-builts). Coble also teaches the need to connect project management with the project design function (See Figure 2, the project management function is connected to the project architect function).

It is old and well known in the art of construction project management to perform predesign of programs containing a number projects, i.e., to create plans of projects, subprojects and tasks before activity is actually commenced. Brown teaches such a system.

Specifically, Brown teaches a planning system to perform predesign of a program having a plurality of projects (column 9 line 45-50). Brown teaches that his planning system may be connected to various industry specific systems (column 5 line 59-64).

It would be therefore obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Coble and Norand, regarding connecting a handheld computer in the field to upload construction information, to include the step of connecting the design system taught by Coble to a planning system to perform predesign because it would provide the project management necessary to successfully administer a construction project.

Regarding **Claim 2**, Norand, Coble and Brown teach all the limitations of Claim 1 above, and Norand also teaches:

**wherein the handheld computer collects work-in-progress data.**

Reference X1 page 3 paragraph 2 line 4-5, work in progress data is collected by Norand's handheld computer.

Regarding **Claim 3**, Norand, Coble and Brown teach all the limitations of Claim 1 above, and Norand also teaches

**wherein the handheld computer collects project and contract identification,**

Reference X1 page 3 paragraph 2 line 4-5, contractor (i.e. contract identification) data is collected by Norand's handheld computer.

Reference X1 page 2 paragraph 3 line 9, contract information is collected by handheld computer.

**inspector identification,**

Reference X1 page 2 paragraph 3 line 9-10, inspection reports can be inputted into the Norand computer. An inspection report contains information about what was inspected, and also contains who was performing the inspection.

Norand does not teach:

**wherein the handheld computer collects item number, location, and one or more description of activities.**

Coble teaches:

**wherein the handheld computer collects item number, location, and one or more description of activities**



Page 3 Figure 3 – This form contains Unit No (i.e. item number) and description of activities (e.g. checklists for pouring concrete – formwork) as well as one description of activities “Pour Check Out Sheet” describing the pouring of concrete.

Page 4 paragraph 1 line 11-15, activities related to change notices are described – see also Figure 4.

Both Coble and Norand disclose providing wireless mobile computing capability to field workers, thus both Coble and Norand are analogous art.

Coble teaches that providing construction crews in the field with mobile wireless devices improves their productivity (Page 3 paragraph 2 line 1-2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Norand, Coble and Brown, regarding providing field workers with mobile computers, with providing mobile workers with the ability of the handheld computer to collect item number, location, and one or more description of activities, as taught by Coble, because it would improve the productivity of construction workers at the job sites.

Regarding **Claim 4**, Norand, Coble and Brown teach all the limitations of Claim 1 above, and Norand also teaches:

**wherein the handheld computer collects labor related information.**

Reference X1 page 2 paragraph 3 line 8, daily time sheets (i.e. labor related information) are collected by Norand's handheld computer.

Regarding **Claim 5**, Norand, Coble and Brown teach all the limitations of Claim 1 above, and Norand also teaches:

**wherein the handheld computer collects labor type, quantity and hours.**

Reference U1 page 4 paragraph 9 line 1-8, Norand's computer records the driver time associated with a particular truck (i.e. labor type) and the number of hours a driver works.

Reference U1 page 4 paragraph 11 line 1-3, information on delivery information (i.e. quantity of goods delivered) is collected by the handheld computer.

Regarding **Claim 6**, Norand, Coble and Brown teach all the limitations of Claim 1 above, and Norand also teaches:

**wherein the handheld computer collects equipment information.**

Reference U1 page 4 paragraph 9 line 4-5, the driver enters their truck number (i.e. equipment information) into the handheld computer.

Regarding **Claim 7**, Norand, Coble and Brown teach all the limitations of Claim 1 above, and Norand also teaches:

**wherein the handheld computer collects equipment type,**

Reference U1 page 4 paragraph 9 line 4-5, the driver enters their truck number, (i.e. equipment type).

**quantity,**

Reference U1 page 3 paragraph 3 line 1-3 & paragraph 4 line 1-4, bill of lading document information is entered into the computer. The bill of lading contains quantity information.

**hours in use,**

Reference U1 page 2 paragraph 2 line 1-4, The hours in use of a truck is recorded, since the time stamp for each stop is recorded. Thus at the end of the day, the total time a truck was being driven as well as stop time is recorded.

**and stand-by hours.**

Reference U1 page 2 paragraph 2 line 3-4, standby time is recorded when a driver arrives or leaves or leaves at a stop. This time is recorded in hours and minutes for proof of delivery to a customer.

Regarding **Claim 8**, Norand, Coble and Brown teach all the limitations of Claim 1 above, and Norand also teaches:

**wherein the handheld computer collects submittal information.**

Reference X1 page 3 paragraph 1 line 4-5, submittal information is collected by the handheld computer and can be printed off to provide documentation that can be submitted to comply with regulations.

Regarding **Claim 9**, Norand, Coble and Brown teach all the limitations of Claim 1 above, and Norand also teaches:

**wherein the handheld computer collects weather condition, comments, and an inspector name.**

Reference X1 page 2 paragraph 3 line 9-10, inspection reports would include an inspector's name and comments.

Norand also teaches the completion of daily work forms on the computer where they had previous been done by hand.

Reference X2 page 2 paragraph 1 line 1-3, daily work forms were automated by the Norand wireless handheld system.

Norand does not teach:

**wherein the handheld computer collects weather condition.**

Coble teaches the use of handheld wireless computers to automate the entry of daily data by construction foremen, including adding comments about daily problems (Page 3 paragraph 7 line 3-4, short descriptions of daily construction-related problems entered).

Both Coble and Norand disclose providing wireless mobile computing capability to field workers, thus both Coble and Norand are analogous art.

Coble teaches that providing construction crews in the field with mobile wireless devices improves their productivity (Page 3 paragraph 2 line 1-2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Norand, Coble and Brown, regarding providing field workers with mobile computers, with providing mobile workers with the ability of the handheld computer to collect short descriptions of daily construction related problems, as taught by Coble, because it would improve the productivity of construction workers at the job sites.

Norand, Coble and Brown do not teach where weather information is collected by the handheld computer.

Official Notice is taken that it is old and well known in the art for weather to have an impact on construction projects, including to cause delays due to weather-related problems. Weather delays are known to impact a construction schedule and are tracked so that progress against a deadline can take into weather delays and be more accurate in estimating the completion timing.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the collective teachings of Norand, Coble and Brown, regarding

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providing handheld computers that automate the entering and collection of daily report data, to include the step of entering weather data, because it would improve the scheduling process for construction projects by automatically tracking weather-related impacts on schedule.

Regarding **Claim 10**, Norand, Coble and Brown teach all the limitations of Claim 1 above, and Norand also teaches:

**wherein the handheld computer hot-syncs collected information to a server.**

Reference U2 page 2 paragraph 4 line 5, Norand uses a Nor\*Ware 6920 Communications Server for communication with units in the field. This unit receives information from the handheld unit in the field.

Reference W1 page 1 paragraph 9 line 6-10, every time a driver enters information into his handheld computer, the information is hot-synced back to the wireless LAN.

Regarding **Claim 11**, Norand teaches all the limitations of Claim 10 above, and Norand also teaches:

**wherein the collected information is hot-synced wirelessly using a wireless handheld unit.**

Reference W1 page 1 paragraph 9 line 6-10, every time a driver enters information into his handheld computer, the information is hot-synced back to the wireless LAN.

Regarding **Claim 12**, Norand teaches all the limitations of Claim 10 above, and Norand also teaches:

**a modem coupled to the handheld computer, wherein the information can be hot-synced using a modem.**

Reference W1 page 1 paragraph 9 line 6-10, every time a driver enters information into his handheld computer, the information is hot-synced back to the wireless LAN.

Reference V1 page 1 paragraph 7 line 2, the Norand computer can use fax-modem cards.

Regarding **Claim 13**, Norand teaches all the limitations of Claim 10 above, and Norand also teaches:

**a hot-sync cradle coupleable to the handheld computer, the cradle hot-syncing the collected information for transmission to a server.**

Reference W1 page 2 paragraph 1 line 3-5, driver can put the handheld computer in a cradle in a truck for hot-syncing the collected information for transmission to a server.

Reference U2 page 2 paragraph 4 line 5, Norand uses a Nor\*Ware 6920 Communications Server for communication with units in the field. This unit receives information from the handheld unit in the field.

**Claims 14-22** recite similar limitations as those recited in **Claims 1-13** above, and are therefore rejected under the same rationale.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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*Jonathan G. Sterrett*  
Primary Examiner  
Art Unit 3623